

# Work Order ID 111267

January-09-14 2:47:25 PM

**\*111267\***

Ship 149 Page 1

Item ID: D350-607-043A      Accept      **\*N900040100\***      Setup Start **\*NS1\***  
 Revision ID:      Stop **\*NS2\***  
 Item Name: Heli-Utility-Basket<sup>TM</sup> (Automatic Lid Opener)  
 Start Date: 1/09/14      Start Qty: 1.00      **\*1\***      Cust Item ID:  
 Required Date: 1/14/14      Req'd Qty: 1.00      **\*1\***      Customer:  
 Reference:

Approvals:      Process Plan: MF      Date: 14-01-09      Tooling:      Date:      Run Start **\*NR1\***  
 QC:      Date:      SPC (Y/N):      Date:      Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
100	DOCUMENT CONTROL	0.00							
<b>*100*</b>									
DC	Memo	0.00							
Document Control	Photocopy bluefile & type labels per PPPD350-607-043A CHG002								
110	Pick Kit	0.00							
<b>*110*</b>									
Packaging	Memo	0.00							
Packaging	PULL FROM STK: 1 X D350-607-043 B <u>83116</u>								

1270 ABERDEEN ST  
HAWKESBURY ON CANADA K6A 1K7  
TEL: 765-532-2200 www.dart.ca

**DART AEROSPACE**

PATENT	N/A		
P/N	D350-607-043/-044	CHG	CHG006
DESC.	Heli-Utility-Basket	STC	SH94-14
LOT	B83116	STC	SR00213NY
MODEL	AS350/355	STC	

APPROVAL # 09-89      MADE IN CANADA      D2729-4

DAS 14-01-10  
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Item ID: D350-607-043A

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Stop

**\*NS2\***

Item Name: Heli-Utility-Basket<sup>TM</sup> (Automatic Lid Opener)

Start Date: 1/09/14

Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 1/14/14

Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

**\*NR1\***

Stop

**\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
123	QC3- Inspect Part Finish	0.00							
<b>*123*</b>									
QC	Memo	0.00							
Quality Control									
124		0.00							
<b>*124*</b>									
HandFinish	Memo	0.00							
Hand Finishing	RE-ASSEMBLE PER DRWG D350-607 TO MAKE D350-607-043A PER ICA PG 17-18								
125	QC5- Inspect part completeness to step on W/O	0.00							
<b>*125*</b>									
QC	Memo	0.00							
Quality Control									

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Item ID: D350-607-043A

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***Item Name: Heli-Utility-Basket<sup>TM</sup> (Automatic Lid Opener)Start Date: 1/09/14 Start Qty: 1.00 **\*1\***

Cust Item ID:

Required Date: 1/14/14 Req'd Qty: 1.00 **\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC5- Inspect part completeness to step on W/O	0.00							
<b>*130*</b>									
QC	Memo	0.00							
Quality Control									
140	Pick Kit	0.00							
<b>*140*</b>									
Packaging	Memo	0.00							
Packaging	ENSURE ORIGINAL KIT IS IN BOX D350-607-241								
			DAS 6 9-89	14/1/10					
150	QC4- 100% Inspect kits for completeness	0.00							
<b>*150*</b>									
QC	Memo	0.00							
Quality Control									
			DAS 6 9-89	14/1/10					

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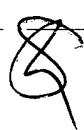
**\*111267\***

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**Item ID:** D350-607-043A **Accept** **\*N900040100\*** **Setup Start** **\*NS1\***  
**Revision ID:** **Stop** **\*NS2\***  
**Item Name:** Heli-Utility-Basket<sup>TMTM</sup> (Automatic Lid Opener)  
**Start Date:** 1/09/14 **Start Qty:** 1.00 **\*1\*** **Cust Item ID:**  
**Required Date:** 1/14/14 **Req'd Qty:** 1.00 **\*1\*** **Customer:**  
**Reference:**

**Approvals:** **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Run Start** **\*NR1\***  
**QC:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **SPC (Y/N):** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Stop** **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160		0.00							
<b>*160*</b>	Packaging								
Packaging	<b>Memo</b>	0.00							
Packaging	REPACKAGE PER PPP USING NEW B/N								
	Identify and pack for shipping as per PPP D350-607-043A								
	Location: _____								
170									
	QC21- Final Inspection - Work Order Release	0.00							
<b>*170*</b>									
QC	<b>Memo</b>	0.00							
Quality Control									


**DAS**  
**6**  
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**ME**  
**14-01-10**



# Picklist Print

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Work Order ID: 111267

Parent Item: D350-607-043A

Start Date: 1/09/14

Required Date: 1/14/14

Parent Item Name: Heli-Utility-Basket<sup>TM</sup> (Automatic Lid Opener)

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP RevB: as per dwg revC DD 10.01.18 verified by:EC  
 10.04.19 verified by:EC  
 IPP Rev:D 10.10.18 remove D350-607-143 and added individual parts of D350-607-143 in DD  
 verf:JLM IPP REV:E 12.07.24 AS PER ECN 12-603 DD VERF:EC  
 IPP REV:F 13.08.07 UPDATED BOM DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2332-041		Manufactured	No				Each	15.0000		-1			
-----------	--	--------------	----	--	--	--	------	---------	--	----	--	--	--

Lid Prop Assembly 6.69"

Location	Loc Qty	Loc Code
FG	2	
89226	2	
ST255	13	
102906	7	
106125	6	

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D350-607-043		Manufactured	No				Each	3.0000		1			
--------------	--	--------------	----	--	--	--	------	--------	--	---	--	--	--

Heli-Utility-Basket<sup>TM</sup> Split Lid (Fits LH or RH)

DAS  
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8-89

Location	Loc Qty	Loc Code
FG102	3	
83116	1	
87537	1	
87923	1	

R

D350-607-143		Manufactured	No				Each	1.0000		1			
--------------	--	--------------	----	--	--	--	------	--------	--	---	--	--	--

Automatic Lid Opener (Long & Short Basket, Split Lid)

Location	Loc Qty	Loc Code
FG	1	
83111	1	

111280 MF 14-01-10

## 2.0 GENERAL NOTES

### COMPATIBILITY

Compatibility of this installation with the aircraft is the responsibility of the installer. Ensure that this installation does not conflict with a previous modification.

### CONTINUING AIRWORTHINESS

This installation should be maintained in accordance with the Instructions for Continued Airworthiness ICA-D350-607.

## 3.0 INSTALLATION PROCEDURE

For installation of D350-607-041/-041A/-043/-043A/-045/-045A/-047/-047A *Heli-Utility-Basket™*.

- 3.1 **NOTE:** For aircraft equipped with high gear, the Dart *Heli-Utility-Basket™* is compatible with Dart D350-591 high-gear steps. The D350-591 step height must be set as shown in Figure 1 to ensure that the cargo doors will open with the basket installed. For aircraft equipped with low gear, the Dart *Heli-Utility-Basket™* is **not** compatible with Dart D350-591 low gear steps; any Dart low gear step will have to be removed before basket installation.
- 3.2 The D350-607-041/-043/-045/-047 *Heli-Utility-Basket™* may be installed on either the LH or RH side of the aircraft. For RH installations, the D2332-041 Prop Assembly should be moved to the aft end of the basket. Use existing hardware and ensure nuts face aft.
- 3.3 Install the D2732-030 Rubber Cushions, D2230-1 Lugs and D2324 Strut onto the basket as shown in Figures 2 and 3, using the AN4 hardware shown.  
**NOTE:** The AN4-15A bolts may be replaced with a stainless steel positive locking quick release pin with a minimum double shear strength of 2400 lbs and with a 1.0 inch grip length and 0.25 inch diameter (Avibank: BLC4B10S, BLC4TA10S, BLC4R10S, BLC4LA10S; MS Number: MS17984C410, MS17985C410, MS17986C410, MS17987C410)
- 3.4 Present the basket to the crosstubes. Propping the basket at the appropriate height can facilitate installation. If the basket is being installed on high gear with Dart D350-591 steps, temporarily place a 0.063" (1.6mm) shim on the step and rest the basket on the shim. Remove shims after bolts are torqued.
- 3.5 Attach the basket with the D2230-3 Clamps and AN4 hardware shown in Figure 2 and 3. Leave bolts loose to allow for adjustment.
- 3.6 Tighten clamp bolts once height is positioned properly. Do not exceed torque of 60 in-lb (6.8 Nm) on the nuts. **CAUTION:** Over-torquing the nuts could lead to structural damage of the clamps.

## 4.0 INSTALLATION OF OPTIONAL KITS

### 4.1 D350-607-141 AUTOMATIC LID OPENER INSTL (FOR USE ON -041 BASKET)

**NOTE:** Once this modification is complete you will not be able to re-install the D2332-041 Prop Arm.

- 4.1.1 Remove the D2332-041 Prop Arm.
- 4.1.2 Grind Flush the D2327-3 Spacer Bushing on both ends of the Basket as shown in Figure 8a (it is permissible to grind all 4 Spacers Flush). Touch up paint Per ICA-D350-607 Section 5.1 Item 4.
- 4.1.3 Locate the D3953-1 Gas Spring Bracket as shown in Figure 8a. Trim Steel Mesh locally as required. Touch up paint per ICA-D350-607 Section 5.1 Item 4. Transfer mark and drill 2X Ø0.194 holes thru the Basket lid square tube structure as shown in Detail M. Install the D3953-1 Gas Spring Bracket & D3953-13 Gas Spring Spacer using 2X AN3C16A Bolt, 2X NAS1149C0332R Washer & 2X MS21043-3 NUT as Shown in View P-P.

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- 4.1.4. Locate the D3953-5 Gas Spring Stud as shown in Figure 8a. Trim Steel Mesh locally as required. Touch up paint per ICA-D350-607 Section 5.1 Item 4. Transfer Mark and Drill 2X Ø0.194 holes thru the Basket base square tube structure as shown in Detail L. Fasten D3953-5 IAW View N-N using 2X AN3C11A Bolt, 2X NAS1149C0332R Washer & 2X MS21043-3 Nut.
- 4.1.5. Install 1X D3953-11 Gas Spring Spacer onto the D3953-5 Stud as shown in View N-N. Install the large end of the D3969-1 Gas Spring onto the D3953-5 Gas Spring Stud and Fasten in Place using 1X D3953-9 Gas Spring Washer, 1X NAS1149C0432R Washer, 1X AN310-4 Castellated Nut & 1X MS24665-212 Cotter Pin as shown in View N-N. Install Cotter Pin per MS33540 or AC43.13 chapter 7-127.
- 4.1.6. Insert the D3953-3 Gas Spring Stud into the D3953-1 Gas Spring Bracket & Insert the D3953-7 Gas Spring Spacer onto the D3953-3 Gas Spring as Shown in View P-P. Raise the Basket lid and install the rod end of the D3969-1 Gas Spring onto the D3953-3 Gas Spring Stud using 1X D3953-9 Gas Spring Washer, 1X NAS1149C0432R Washer, 1X AN310-4 Castellated Nut & 1X MS24665-212 Cotter Pin as shown in View P-P. Install Cotter Pin Per MS33540 or AC43.13 Chapter 7-127.  
**NOTE:** The D3953-3 Gas Spring Stud can be held in place with a 9/16 open end spanner/wrench.  
**NOTE:** With the lid in the closed position the Gas Spring should not be fully compressed.
- 4.1.7. Repeat steps 4.1.2 through 4.1.6 at the other end of the Basket.
- 4.1.8. Test the installation. If installed properly the Gas Springs should assist the Basket user in both opening and closing the basket lid.

## 4.2 D350-607-143 AUTOMATIC LID OPENER INSTL (FOR USE ON -043/-047 BASKET)

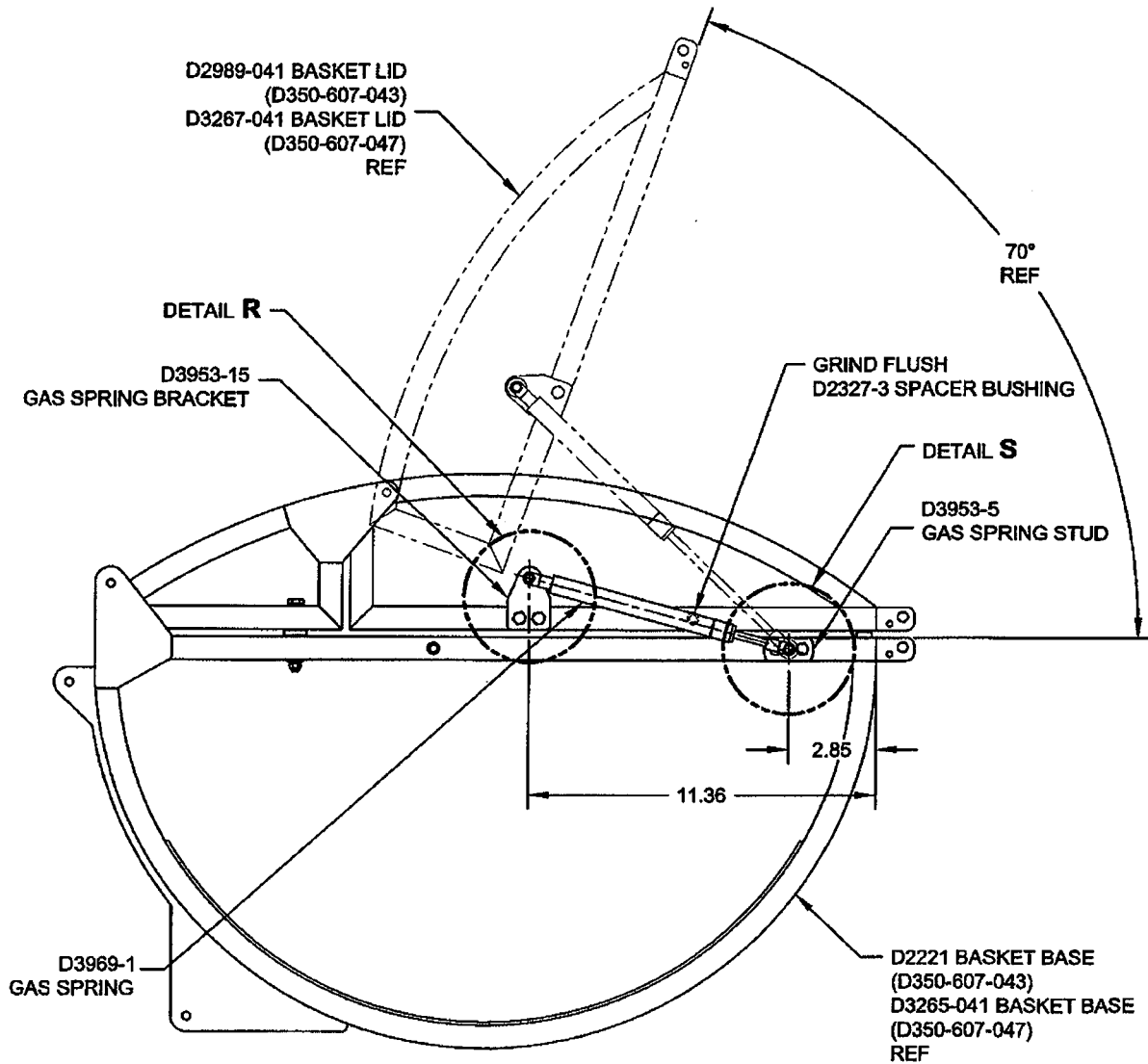
**NOTE:** This kit may be installed at either end of the Basket. However, the Prop Arm must be removed in either case as it will interfere with the function of the Gas Spring.

- 4.2.1 Remove the D2332-041 Prop Arm.
  - 4.2.2 Grind flush the D2327-3 Spacer Bushing on the end of the Basket where the lid opener is to be installed as shown in Figure 9a (it is permissible to grind all 4 spacers flush). Touch up paint per ICA-D350-607 Section 5.1 Item 4.
  - 4.2.3 Locate the D3953-15 Gas Spring Bracket as shown in Figure 9a. Trim steel mesh locally as required. Touch up paint per ICA-D350-607 Section 5.1 Item 4. Transfer mark and drill 2X Ø0.194 holes thru the Basket Lid Square tube structure as shown in Detail R. Install the D3953-15 Gas Spring Bracket & D3953-17 Gas Spring Spacer using 2X AN3C15A BOLT, 2X NAS1149C0332R Washer & 2X MS21043-3 Nut as shown in View T-T.
  - 4.2.4 Locate the D3953-5 Gas Spring Stud as shown in Figure 9a. Trim Steel Mesh Locally as required. Touch up paint per ICA-D350-607 Sections 5.1 Item 4. Transfer mark and drill 2X Ø 0.194 holes thru the Basket Base square tube structure as shown in Detail S. Install 2X AN3C11A Bolt, 2X NAS1149C0332R Washer & 2X MS21043-3 Nut as shown in View U-U. Install the rod end of the D3969-1 Gas Spring onto the D3953-5 Gas Spring Stud using 1X D3953-9 Gas Spring washer 1X NAS1149C0432R Washer, 1X AN310-4 Castellated Nut & 1X MS24665-212 Cotter Pin as shown in View U-U. Install Cotter Pin per MS33540 or AC43.13 Chapter 7-127.
  - 4.2.5 Insert the D3953-3 Gas Spring Stud into the D3953-15 Gas Spring Bracket & insert the D3953-7 Gas Spring Spacer onto the D3953-3 Gas Spring Stud as shown in View T-T. Raise the Basket lid and install the D3969-1 Gas Spring onto the D3953-3 Gas Spring Stud and fasten in place using 1X D3953-9 Gas Spring Washer 1X NAS1149C0432R Washer, 1X AN310-4 Castellated Nut & 1X MS24665-212 Cotter Pin as shown in View T-T. Install Cotter Pin per MS33540 OR AC43.13 Chapter 7-127.
- NOTE:** The D3953-3 Gas Spring Stud can be held in place with a 9/16 open end spanner/wrench.
- NOTE:** With the lid in the closed position the Gas Spring should **not** be fully compressed.

Revision: A

Date: 10.03.10

#11122



**D350-607-143 AUTOMATIC LID OPENER INSTALLATION**

(1 END ONLY)

**Figure 9a – Automatic Lid Opener Installation**

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Revision: **A**

Date: 10.03.10

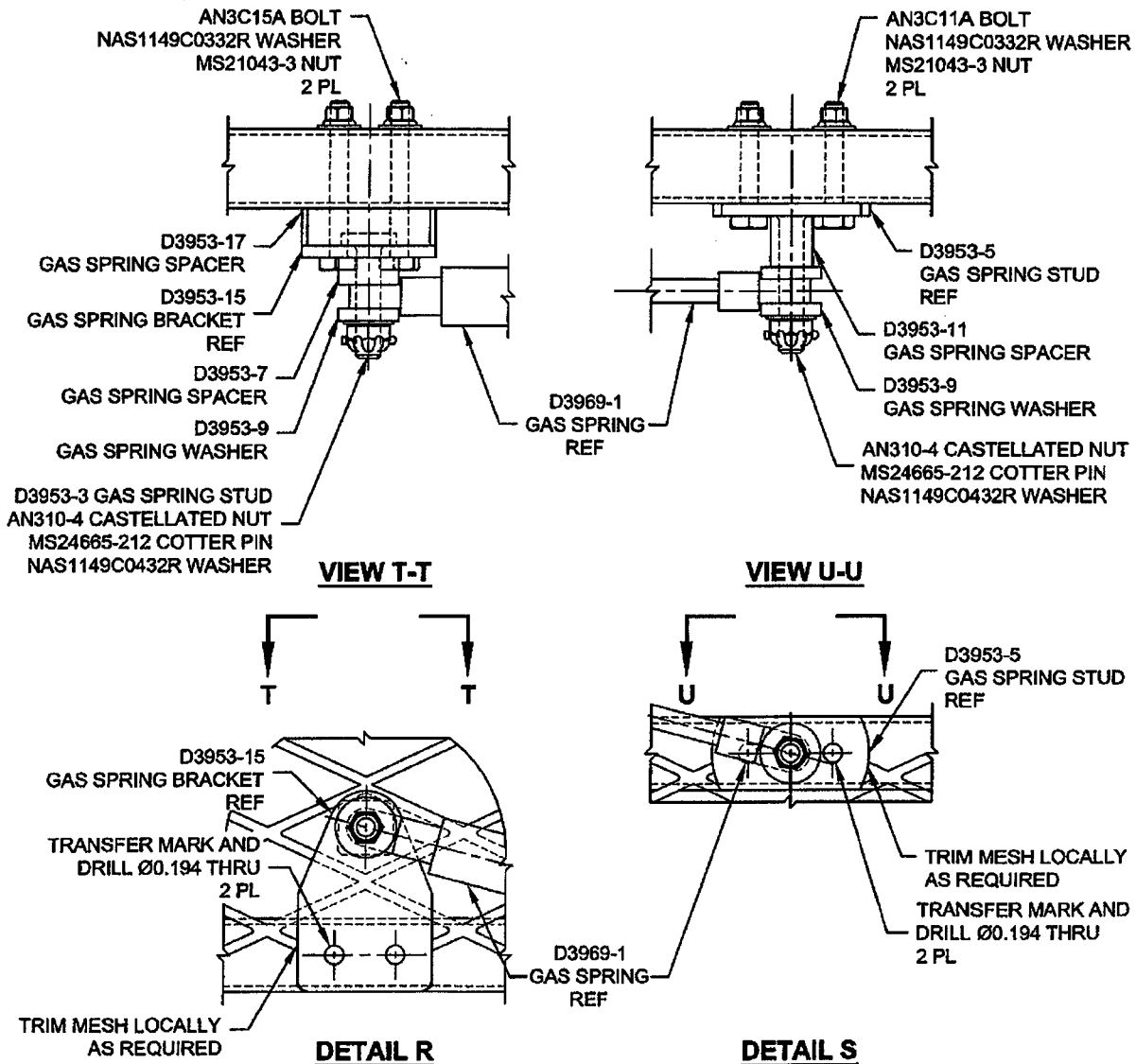


Figure 9b – Automatic Lid Opener Installation

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Item ID: D350-607-043A

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Item Name: Heli-Utility-Basket<sup>TMTM</sup> (Automatic Lid Opener)

Stop \*NS2\*

Start Date: 1/09/14 Start Qty: 1.00 \*1\*

Cust Item ID:

Required Date: 1/14/14 Req'd Qty: 1.00 \*1\*

Customer:

Reference:

Approvals: Process Plan: mf Date: 14-01-09 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \*NR1\*  
Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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DSI 9473

IIN-D350-607-1

A

MLJ 14-01-10

100

\*100\*

DC

Document Control

DOCUMENT CONTROL

Memo

Photocopy bluefile & type labels per PPPD350-607-043A CHG002

0.00

0.00

110

\*110\*

Packaging

Packaging

Pick Kit

Memo

PULL FROM STK:

1 X D350-607-043 B 83116

0.00

0.00

PATENT		N/A	
P/N	D350-607-043/-044	CHG	CHG006
DESC.	Heli-Utility-Basket	STC	SH94-14
LOT	B83116	STC	SR00213NY
MODEL	AS350/355	STC	
APPROVAL # 09-89		MADE IN CANADA	

DAS  
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14-01-10